Please rewrite the paragraph starting at page 1, line 20 and ending at page 2, line 9, as follows:

--A printer having an emulation function is designed to process a plurality of printer control language systems and also to execute printing while switching between the emulation mode and the normal mode in accordance with an application executed by the user. Such a printer has a switch for switching the printer control language or a card slot for switching a circuit board. Many printers can directly print image data from an image input device such as a scanner or digital camera without intervening a host computer. Additionally, along with the recent improvement of processing ability of host computers, various new image processing technologies have been employed. An example is an image processing technology called "gradient fill" for the purpose of filling a predetermined region with smooth grayscale (halftone).--

Please rewrite the paragraph starting at page 2, line 10 and ending at page 2, line 23, as follows:

--The difference between a conventional drawing technique and the technique of filling a region with grayscale using gradient fill will be described as follows. Fig. 1A is a view showing the conventional technique, in which a plurality of objects with different gray levels are arranged and drawn to express the grayscale in the region. In this conventional technique, to eliminate the steps between the gray levels, a number of objects having different gray levels must be generated. This makes data redundant. If the relationship between the data transfer rate and the printing speed is inappropriate, and a

number of objects cannot be generated, ~~disconitinuitys~~ <u>discontinuities</u> are formed between gray levels.--

Please rewrite the paragraph starting at page 3, line 13 and ending at page 4, line 2, as follows:

A rectangular gradient fill object has, as information, coordinates and gray levels of two points and the gradation direction (horizontal or vertical). The gray level of each pixel of a rectangular gradient fill object can be obtained as follows. As shown on the right side of [[in]] Fig. 1B, the apex positions are applied to (x, y) coordinates. Letting (x_1, y_1, c_1) be the coordinated and gray level of apex 1, (x_2, y_2, c_2) be the coordinates and gray level of apex 2, and $(x_n\ y_n, c_n)$ be the coordinates and gray level of an arbitrary target pixel, predetermine gradation in the horizontal direction is given by

$$c_n = (c_2 - c_1) / (x_2 - x_1) \times x_n$$

and predetermined gradation in the vertical direction given by

$$c_n = (c_2 - c_1) / (y_2 - y_1) \times y_n$$